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First chromosome analysis on olive flathead-gudgeon, *Butis amboinensis* (Perciformes, Gobiidae)

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Abstract

The first chromosome analysis and nucleolar organizer region (NOR) pattern of Olive flathead-gudgeon (Butis amboinensis) were studied. Ten fish samples were collected from Institute of Marine Science, Chonburi Province, Thailand. Chromosome preparations were directly performed from kidney tissues. The chromosomes were harvested by colchicines-hypotonic-fixation-air drying method. Conventional staining and Ag-NOR banding techniques were applied to stain the chromosomes using 20% Giemsa solution and 50% silver nitrate solution, respectively. The results showed that the number of diploid chromosome (2n) of Bu. amboinensis was 46. The fundamental number (NF) was 46 in both sexes. The karyotype consisted of 24 large telocentric, 20 medium telocentric and 2 small telocentric chromosomes. A single of NORs of Bu. amboinensis was observed on the single pair at the region adjacent to the centromeres of the medium telocentric chromosome pair 17 (interstitial NOR). The karyotype formula of Bu. amboinensis is as follows: 2n (diploid) $46 = L^t_{24} + M^t_{20} + S^t_2$

Keywords: Butis amboinensis, Chromosome, Karyotype, Nucleolar organizer region.